

REMARKS/ARGUMENT

1) Claims 1, 4-5 and 10-13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Cannon et al. (U.S. Patent No.: 6,650,871, herein after, "Cannon"). Applicants respectfully traverse this rejection as set forth:

Independent Claim 1, as amended, requires and positively recites, a piconet, comprising: "first and second communication devices", "**the first communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission**".

In contrast, Cannon clearly shows in Figs 1-3 a system having a first piconet 150 and a second piconet 160, in which communications between base unit 100a and Bluetooth enabled devices 110, 112, and 114 is enabled solely through Bluetooth enabled protocols (col. 3, lines 39-51). Accordingly, within piconet 150 (and within piconet 160 for that matter), there is only one communication technique between the Bluetooth enabled devices 110, 112 and 114 and base unit 100a. As such, Cannon fails to teach or suggest, a piconet, comprising: "first and second communication devices (e.g., within piconet 150)", "**the first communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission**", as required by Claim 1.

In light of the above, it should be clear that that each and every element of Claim 1 is NOT found expressly, or inherently, in the Cannon reference, as is required by law. See, *Verdegall Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)". Accordingly, the 35 U.S.C. 102(e) rejection of Claim 1 is overcome.

Claim 4 further defines the piconet as defined in claim 1, wherein the first communication device is a master unit. Claim 4 depends from Claim 1 and is therefore allowable for the same reasons set forth above for the allowance of Claim 1.

Independent Claim 5 requires and positively recites, a scatternet, comprising: "a first piconet having a first communication device operating therein", "a second piconet having a second communication device operating therein" and "a third communication device, **enabled to communicate in the first piconet and the second piconet,** communicating to the first communication device using a Bluetooth mode, and communicating to the second communication device using a second mode of transmission".

In contrast, Cannon clearly shows in Figs 1-3 a system in which base unit 100a is enabled to communicate within piconet 150 via Bluetooth protocols and base unit 100b is enabled to communicate within piconet 160 via Bluetooth protocols, base unit 100a does not communicate within piconet 160 and base unit 100b does not communicate within piconet 150. As such, Cannon fails to teach or suggest, "a third communication device, **enabled to communicate in the first piconet and the second piconet,** communicating to the first communication device using a Bluetooth mode, and communicating to the second communication device using a second mode of transmission", as required by Claim 5.

In light of the above, it should be clear that that each and every element of Claim 5 is NOT found expressly, or inherently, in the Cannon reference, as is required by law. See, *Verdegall Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)”. Accordingly, the 35 U.S.C. 102(e) rejection of Claim 5 is overcome.

Independent Claim 10 requires and positively recites, a method for communicating between a first communication device, **enabled to communicate in a first piconet and a second piconet**, and a plurality of other communication devices using multiple modes including a Bluetooth mode of operation, comprising the steps of: “(a) placing the first communication in the Bluetooth mode in order to communicate with a communication device from amongst the plurality of communication devices **in the first piconet**” and “(b) placing the first communication device in a second mode in order to communicate with a communication device from amongst the plurality of communication devices **in the second piconet**”.

In contrast, Cannon clearly shows in Figs 1-3 a system in which base unit 100a is enabled to communicate within piconet 150 via Bluetooth protocols and base unit 100b is enabled to communicate within piconet 160 via Bluetooth protocols, base unit 100a does not communicate within piconet 160 and base unit 100b does not communicate within piconet 150. As such, Cannon fails to teach or suggest, “a method for communicating between a first communication device, **enabled to communicate in a first piconet and a second piconet**, and a plurality of other communication devices using multiple modes including a Bluetooth mode of operation, comprising the steps of: “(a) placing the first communication in the Bluetooth mode in order to communicate with a communication device from amongst the plurality of communication devices **in the first piconet**” and “(b) placing the first communication device in a second mode in order to communicate with a communication device from amongst the plurality of communication devices **in the second piconet**”, as required by Claim 10.

In light of the above, it should be clear that each and every element of Claim 10 is NOT found expressly, or inherently, in the Cannon reference, as is required by law.

See, *Verdegall Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

See also, *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)?

Accordingly, the 35 U.S.C. 102(e) rejection of Claim 10 is overcome.

Claims 11, 12 and 13 stand allowable as depending directly from allowable Claim 10 and by including further limitations not taught or suggested by the reference of record.

Claim 11 further defines a method as defined in claim 10, wherein the first communication device in step (b) uses a “within mode synchronous” technique while in the second mode whereby the packets used to communicate with the communication device from amongst the plurality are only synchronous while the first communication device is in the second mode. Claim 11 depends from Claim 10 and is therefore allowable for the same reasons set forth above for the allowance of Claim 10.

Claim 12 further defines a method as defined in claim 10, wherein the first communication device uses packets to communicate with the communication devices in step (a) and (b) which are “across mode synchronous”. Claim 12 depends from Claim 10 and is therefore allowable for the same reasons set forth above for the allowance of Claim 10.

Claim 13 further defines a method as defined in claim 10, wherein the communication device that the first communication device communicates with in step (a) and (b) is the same communication device from amongst the plurality of communication devices. Claim 13 depends from Claim 10 and is therefore allowable for the same reasons set forth above for the allowance of Claim 10.

2) Claim 2 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. in view of Shoobridge et al. (U.S. Patent No.: 6,650,871, hereinafter, "Shoobridge". Applicants respectfully traverse this rejection as set forth below.

Independent Claim 1, from which Claim 2 depends, requires and positively recites, a piconet, comprising: "first and second communication devices", "**the first communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission**".

In contrast, Cannon clearly shows in Figs 1-3 a system having a first piconet 150 and a second piconet 160, in which communications between base unit 100a and Bluetooth enabled devices 110, 112, and 114 is enabled solely through Bluetooth enabled protocols (col. 3, lines 39-51). Accordingly, within piconet 150 (and within piconet 160 for that matter), there is only one communication technique between the Bluetooth enabled devices 110, 112 and 114 and base unit 100a. As such, Cannon fails to teach or suggest, a piconet, comprising: "first and second communication devices (e.g., within piconet 150)", "**the first communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission**", as required by Claim 1.

Claim 2 further defines the piconet as defined in claim 1, wherein the second mode of transmission is a higher speed mode than the Bluetooth mode.

Irregardless of whether or not Shoobridge discloses a second mode of transmission at a higher speed than the Bluetooth mode, as argued by Examiner, Shoobridge fails to teach or suggest the above-identified deficiencies of the Cannon reference. Accordingly, any combination of Cannon and Shoobridge fails to teach or suggest, a piconet, comprising: "first and second communication devices", "**the first**

communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission", as required by Claim 1 AND "wherein the second mode of transmission is a higher speed mode than the Bluetooth mode", as further required by Claim 2.

In proceedings before the Patent and Trademark Office, "the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art". *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984)). "The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references", *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Gordon*, 733 F.2d at 902, 221 USPQ at 1127. Moreover, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. As discussed above, Examiner has failed to set forth any legitimate suggestion or motivation, either in the references themselves or in the knowledge generally available to one or ordinary skill in that art, to combine and modify Cannon and Shoobridge, as suggested by Examiner. Second, there must be a reasonable expectation of success. Examiner has failed to provide any evidence that combining Cannon with Shoobridge will result in an apparatus that would successfully implement all of the elements of Claim 2. Finally, the prior art reference (or references when combined) must teach or suggest ALL the claim limitations (MPEP § 2143). Applicants respectfully submit that the Examiner has failed to establish all three criteria. Accordingly, Claim 2 is patentable under 35 U.S.C. § 103(a) over Cannon in view of Shoobridge.

3) Claims 3 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. in view of Day (Pub. No.: 2002/0120569), hereinafter, "Day".
Applicants respectfully traverse this rejection as set forth below.

Independent Claim 1, from which Claim 3 depends, requires and positively recites, a piconet, comprising: "first and second communication devices", "the first communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission".

In contrast, Cannon clearly shows in Figs 1-3 a system having a first piconet 150 and a second piconet 160, in which communications between base unit 100a and Bluetooth enabled devices 110, 112, and 114 is enabled solely through Bluetooth enabled protocols (col. 3, lines 39-51). Accordingly, within piconet 150 (and within piconet 160 for that matter), there is only one communication technique between the Bluetooth enabled devices 110, 112 and 114 and base unit 100a. As such, Cannon fails to teach or suggest, a piconet, comprising: “first and second communication devices (e.g., within piconet 150)”, **“the first communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission”**, as required by Claim 1.

Claim 3 further defines the piconet as defined in claim 1, wherein the first communication device maintains synchronization between the Bluetooth mode and the second mode at the physical layer.

Irregardless of whether or not Day discloses synchronization and exchanges the information at the same physical layer, as argued by Examiner, Day fails to teach or suggest the above-identified deficiencies of the Cannon reference. Accordingly, any combination of Cannon and Day fails to teach or suggest, a piconet, comprising: “first and second communication devices”, **“the first communication device communicating with the second communication device using a Bluetooth mode of transmission and a second mode of transmission”**, as required by Claim 1 AND “wherein the first communication device maintains synchronization between the Bluetooth mode and the second mode at the physical layer”, as further required by Claim 3.

Independent Claim 5, upon which Claim 9 depends, requires and positively recites, a scatternet, comprising: "a first piconet having a first communication device operating therein", "a second piconet having a second communication device operating therein" and "**a third communication device, enabled to communicate in the first piconet and the second piconet**, communicating to the first communication device using a Bluetooth mode, and communicating to the second communication device using a second mode of transmission".

In contrast, Cannon clearly shows in Figs 1-3 a system in which base unit 100a is enabled to communicate within piconet 150 via Bluetooth protocols and base unit 100b is enabled to communicate within piconet 160 via Bluetooth protocols, base unit 100a does not communicate within piconet 160 and base unit 100b does not communicate within piconet 150. As such, Cannon fails to teach or suggest, "**a third communication device, enabled to communicate in the first piconet and the second piconet**, communicating to the first communication device using a Bluetooth mode, and communicating to the second communication device using a second mode of transmission", as required by Claim 5.

Claim 9 further defines the scatternet as defined in claim 5, wherein synchronization between the Bluetooth mode and the second mode is maintained in the third communication device at the physical layer of the Bluetooth mode and the second mode.

Irregardless of whether or not Day discloses synchronization and exchanges the information at the same physical layer, as argued by Examiner, Day fails to teach or suggest the above-identified deficiencies of the Cannon reference. Accordingly, any combination of Cannon and Day fails to teach or suggest, "**a third communication device**,

enabled to communicate in the first piconet and the second piconet, communicating to the first communication device using a Bluetooth mode, and communicating to the second communication device using a second mode of transmission”, as required by Claim 5 AND “wherein synchronization between the Bluetooth mode and the second mode is maintained in the third communication device at the physical layer of the Bluetooth mode and the second mode”, as further required by Claim 9.

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art”. *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984)). “The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references”, *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious “modification” of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.** *In re Gordon*, 733 F.2d at 902, 221 USPQ at 1127. Moreover, it is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. As discussed above, Examiner has failed to set forth any legitimate suggestion or motivation, either in the references themselves or in the knowledge generally available to one or ordinary skill in that art, to combine and modify Cannon and Day, as suggested by Examiner. Second, there must be a reasonable expectation of success. Examiner has failed to provide any evidence that combining Cannon with Day will result in an apparatus that would successfully implement all of the elements of Claim 3 and 9. Finally, the prior art reference (or references when combined) must teach or suggest ALL the claim limitations (MPEP § 2143). Applicants respectfully submit that the Examiner has failed to establish all three criteria. Accordingly, Claims 3 and 9 are patentable under 35 U.S.C. § 103(a) over Cannon in view of Day.

4) Claims 6-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. in view of Johansson (U.S. Patent No.: 6,975,613), hereinafter, "Johansson". Applicants respectfully traverse this rejection as set forth below.

Independent Claim 5, upon which Claims 6-8 depend, requires and positively recites, a scatternet, comprising: "a first piconet having a first communication device operating therein", "a second piconet having a second communication device operating

therein" and "a third communication device, **enabled to communicate in the first piconet and the second piconet**, communicating to the first communication device using a Bluetooth mode, and communicating to the second communication device using a second mode of transmission".

In contrast, Cannon clearly shows in Figs 1-3 a system in which base unit 100a is enabled to communicate within piconet 150 via Bluetooth protocols and base unit 100b is enabled to communicate within piconet 160 via Bluetooth protocols, base unit 100a does not communicate within piconet 160 and base unit 100b does not communicate within piconet 150. As such, Cannon fails to teach or suggest, "a third communication device, **enabled to communicate in the first piconet and the second piconet**, communicating to the first communication device using a Bluetooth mode, and communicating to the second communication device using a second mode of transmission", as required by Claim 5.

Claim 6 further defines the scatternet as defined in claim 5, wherein the third communication device comprises a slave unit.

Claim 7 further defines the scatternet as defined in claim 6, wherein the first and second communication devices comprises master units.

Claim 8 further defines the scatternet as defined in claim 5, wherein the third communication device comprises a device which acts as a master unit when communicating with the first communication device and acts as a slave unit when communicating with the second communication device.

Irregardless of whether or not Johansson discloses a slave unit, as argued by Examiner, Johansson fails to teach or suggest the above-identified deficiencies of the Cannon reference. Accordingly, any combination of Cannon and Day fails to teach or suggest, “**a third communication device, enabled to communicate in the first piconet and the second piconet, communicating to the first communication (in the first piconet) device using a Bluetooth mode, and communicating to the second communication device (in the second piconet) using a second mode of transmission**”, as required by Claim 5 AND “**the scatternet as defined in claim 5, wherein the third communication device comprises a slave unit**” as required by Claim 6, OR “**the scatternet as defined in claim 6, wherein the first and second communication devices comprises master units**”, as required by Claim 7, OR “**wherein the third communication device comprises a device which acts as a master unit when communicating with the first communication device and acts as a slave unit when communicating with the second communication device**”, as required by Claim 8.

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art”. *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). “The Examiner can satisfy this burden **only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references**”, *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious “modification” of the prior

art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Gordon*, 733 F.2d at 902, 221 USPQ at 1127. Moreover, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. As discussed above, Examiner has failed to set forth any legitimate suggestion or motivation, either in the references themselves or in the knowledge generally available to one or ordinary skill in that art, to combine and modify Cannon and Johansson, as suggested by Examiner. Second, there must be a reasonable expectation of success. Examiner has failed to provide any evidence that combining Cannon with Johansson will result in an apparatus that would successfully implement all of the elements of Claims 6, 7 and 8. Finally, the prior art reference (or references when combined) must teach or suggest ALL the claim limitations (MPEP § 2143). Applicants respectfully submit that the Examiner has failed to establish all three criteria. Accordingly, Claims 6, 7 and 8 are patentable under 35 U.S.C. § 103(a) over Cannon in view of Johansson.

Claims 1-12 stand allowable over the cited art. New claims 13-20 all depend directly or indirectly from allowable Claims. Applicants respectfully request allowance of the application as the earliest possible date.

Respectfully submitted,


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